

REMARKS

By this amendment, applicants have amended claim 29 to more clearly define their invention and have amended claims 29 and 35 to correct the formatting of the individual steps of the process.

The Examiner alleges the application to contain claims directed to the following patentably distinct species of the claimed invention:

I - "a method of forming an element separation layer on a semiconductor substrate including the steps of forming a thermal oxide on the surface of the substrate, forming the element separation layer and performing a heating process on the substrate having the thermal oxide"; and

II - "a method of forming an element separation layer on a semiconductor substrate including the steps of forming a first thermal oxide on the substrate, forming the element separation layer, forming a second thermal oxide layer on the substrate and performing a heating step on the substrate having the second thermal oxide."

In response to this election of species requirement, applicants elect the first species identified by the Examiner, i.e., a method of forming an element separation layer on a semiconductor substrate including the steps of forming a thermal oxide on the substrate, forming the element separation layer and performing a process on the substrate having the thermal oxide. However, the election requirement is traversed for the following reasons.

First, claims to be restricted to different species must be mutually exclusive. Manual of Patent Examining Procedure (MPEP) 806.04(f). The two "species"

identified by the Examiner are not mutually exclusive. The Manual of Patent Examining Procedure states the test for whether claims can be restricted as follows:

The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species.

MPEP 806.04(f). Here, the first "species" identified by the Examiner includes steps or limitations also found in the second "species." That is, the second "species" includes the steps of "forming an element separation layer on a semiconductor substrate including the steps of forming a thermal oxide on the surface of the substrate, forming the element separation layer and performing a heating process on the substrate having the thermal oxide." Since both "species" include these steps or limitations, the claims cannot be restricted to a "species" identified by the Examiner since they are not mutually exclusive.

Secondly, the Examiner has not properly identified each of the alleged species. As noted in MPEP 809.02(a) the Examiner must clearly identify each of the disclosed species to which the claims are restricted. The species are preferably identified as the species of various figures or the species of various examples. While the subject application contains various figures and various examples, the Examiner has not identified the species with reference to the figures or examples. Moreover, since the species are not mutually exclusive, as noted above, there is no clear line of demarcation between the species. In fact, the first "species" identified by the Examiner appears to be "generic" to the second "species" identified by the Examiner.

Lastly, it is not clear how the Examiner intends to relate the "species" to the claims to be restricted. For example, claims 30, 31 and 36 do not refer to forming a

thermal oxide. Accordingly, it is not clear how these claims relate to either of the two "species" identified by the Examiner.

Since the Examiner has not clearly identified proper species to which the claims should be restricted, it is difficult for applicants to provide a listing of the claims readable on the elected species. However, since none of the claims exclude the features of the first "species" identified by the Examiner, it is submitted all of the process claims, i.e., claims 15 - 33, 35, 36 read on the elected species. In fact, since all of the process claims are broad enough to read on either of the two "species" identified by the Examiner, it appears all of claims 15 - 33, 35 and 36 are generic.

In view of the foregoing remarks, reconsideration and withdrawal of the election of species requirement, and examination of all of claims 15 - 33, 35 and 37, are requested.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.34397CV2), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read 'Alan E. Schiavelli', is written over a horizontal line.

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